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EXAMINER
POON, KING Y

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DATE MAILED: 01/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

--- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___3___ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-6, 15, and 16_____ is/are pending in the applica

    4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-6, 15, and 16_____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    a)☒ All b) ☐ Some* c) ☐None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). ___3___

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United
States before the invention thereof by the applicant for patent, or on an international application by another who
has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
thereof by the applicant for patent.

2.   Claims 1, 3, 4, 15, and 16 rejected under 35 U.S.C. 102(e) as being anticipated by Sugiura

et al. (U.S. Patent # 6,047,111)

Regarding claim 1: Sugiura teaches a job processing system (column 2, lines 45-50)

comprising a terminal equipment (host device, column 2, line 49) for issuing a job request (print

request, column 2, line 48) by handling a plurality of documents (A1, A2, A3, A4, fig. 10A) as

one job, and a job scheduling device (CPU 11, fig. 6) which sequentially processes jobs (print job

is connected to print queue connection points page by page, column 8, lines 15-20, fig. 10A) that

by storing the jobs, received from the terminal equipment through a network, (column 6, line 38)

in a queue (column 7, lines 50-60) and sending a job execution section (23, fig. 6) a processing

request (request process of print, fig. 11b) relating to a document specified by the job stored in

the queue, the terminal equipment comprising: attribute information adding means (the program

code that allows users to assign paper feed inlet and paper discharge outlet, column 10, lines 20-

32) for adding to information which specifies a job output method to a job request as attribute

information of the job, and the job scheduling device comprising: attribute information setting

means (the function part of the printer control that is controlling the print specification

information, column 7, lines 50-60, fig. 7) for acquiring attribute information (fig. 7) included in

the received job and sets the attribute information (column 7, lines 55-60) to information which

specifies a job and a document; (fig. 10A) a queue for storing, (column 7, lines 55-60) as a job, a

group of items of the information which specify a job and a document; (fig. 7) and output result

control means (the function part of the printer control that carries out printing in accordance with

the print request, column 3, lines 33-35) which, upon reference (in accordance, column 3, line

33-34) to the information items (printing specification, column 3, lines 23-25, fig. 7) which

specify a job and a document with respect to the job stored in the queue, controls the processing

request issued to the job execution section in such a way that a specified number of copies (fig.

10c shows one copy of each job are output) of the job are output using the information (print

specification, fig. 7) which specifies a job output method.

Regarding claim 3: Sugiura et al. teach a job processing system (column 2, lines 45-50)

comprising a terminal equipment (host device, column 2, line 49) for issuing a processing request

by (print request, column 2, line 48) handling a plurality of documents (A1, A2, A3, A4, fig.

10A) as one job, a job execution section (23, fig. 6) for printing the documents, and a job

scheduling device (CPU, fig. 6) which accepts a document fig. 8) input from the terminal

equipment through a network (column 6, line 38) and issues a processing request relating to that

document to the job execution section, (S17, fig. 11B) the terminal equipment comprising:

control information specifying means (the program code that allows users to assign the printing

of A1, A2, A3, and A4, fig. 10A) for specifying a processing start wait (connected to BMM,

column 8, line 44) for a leading document (A1) among the plurality of documents, and the job

scheduling device comprising: preparation means (the function of the printer CPU that controls

the print specification information, column 7, lines 55-60) for preparing information which

specifies a received document; (fig. 7) queuing means (column 7, lines 55-60) for storing the

prepared information which specifies the document by associating the information on a

job-by-job basis; (fig. 7) control information setting means (the function of the print CPU that

set print specification information, fig. 7) which, if a processing start wait is specified

(information of queue connection, fig. 7)for the leading document (A1, fig. 10A) among a

plurality of received documents, (A1, A2, A3, A4, fig. 10A) sets the processing start wait (set the

connection point to BMM, column 8, line 44, fig. 7) to information for specifying this leading

document; and control state setting means which, (S15, fig. 11B) if the processing start wait is

set to information which specifies the leading document of the job stored in the queuing means,

renders that job in a processing start wait state, (S6, fig. 11B) wherein the job scheduling device

sequentially retrieves jobs stored in the queuing means when the job execution section becomes

enabled to accept processing, (fig. 10A) issues a processing request (S17, fig. 11B) for a

corresponding document when there is information specifying a document to which a processing

request can be issued, and when a job is placed in the processing start wait state, prevents the

issue of processing requests with respect to a document for that job (when the document is in

BMM state, the program cannot request process of print, fig. 11B) and documents for subsequent

jobs until that job is released from the processing start wait state by a user's instruction or a

timeout (the time is complete form S6 to S8, fig. 11B).

Regarding claim 4: Sugiura et al. teach a job processing system (column 2, lines 45-50)

comprising a terminal equipment (host device, column 2, line 49) for issuing a processing request

by (print request, column 2, line 48) handling a plurality of documents (A1, A2, A3, A4, fig.

10A) as one job, a job execution section (23, fig. 6) for printing the documents, and a job

scheduling device (CPU, fig. 6) which accepts a document fig. 8) input from the terminal

equipment through a network (column 6, line 38) and issues a processing request relating to that

document to the job execution section, (S17, fig. 11B) the terminal equipment comprising:

control information specifying means (the program code that allows users to assign the printing

of A1, A2, A3, and A4, fig. 10A) for specifying a processing completion wait (connected to

BMM, column 8, line 44) for a leading document (A1) among the plurality of documents, and

the job scheduling device comprising: preparation means (the function of the printer CPU that

controls the print specification information, column 7, lines 55-60) for preparing information

which specifies a received document; (fig. 7) queuing means (column 7, lines 55-60) for storing

the prepared information which specifies the document by associating the information on a

job-by-job basis; (fig. 7) control information setting means (the function of the print CPU that

set print specification information, fig. 7) which, if a processing completion wait is specified

(information of queue connection, fig. 7)for the leading document (A1, fig. 10A) among a

plurality of received documents, (A1, A2, A3, A4, fig. 10A) sets the processing completion wait

(set the connection point to BMM, column 8, line 44, fig. 7) to information for specifying this

leading document; and control state setting means which, (S15, fig. 11B) if the processing start

wait is set to information which specifies the leading document of the job stored in the queuing

means, renders that job in a processing completion wait state, (S6, fig. 11B) wherein the job

scheduling device sequentially retrieves jobs stored in the queuing means when the job execution

section becomes enabled to accept processing, (fig. 10A) issues a processing request (S17, fig.

11B) for a corresponding document when there is information specifying a document to which a

processing request can be issued, and when a job is placed in the processing start completion

state, prevents the issue of processing requests with respect to a document for that job (when the

document is in BMM state, the program cannot request process of print, fig. 11B) and documents

for subsequent jobs until that job is released from the processing completion wait state by a user's

instruction or a timeout (the time is complete form S6 to S8, fig. 11B).

Regarding claim 15: Sugiura et al. teach a job scheduling device (fig. 6) which

sequentially stores jobs, (fig. 7, column 7, lines 55-60, column 8, lines 15-20) for which

processing requests (print request, column 8, line 18) were received from terminals, (host,

column 8, line 16) in a queue (column 7, line 58) and sequentially processes the jobs (fig. 7) held

in the queue using a job execution section, (23, fig. 6) the job scheduling device comprising: a

plurality of queues (wait for BMM acquirement queue, wait for extension queue, wait for print queue, wait for paper discharge queue, and stop wait queue, fig. 10A, column 8, lines 10-12) provided corresponding to states of the jobs; (non stop state, (BMM acquirement, extension, print, paper discharge), and stop state, fig. 10A) scheduling means (the function part of the print control that connect each print job to a print queue connection point, column 8, lines 10-30) for scheduling the jobs using the plurality of queues; (wait for BMM acquirement queue, wait for extension queue, wait for print queue, wait for paper discharge queue, and stop wait queue, fig. 10A, column 8, lines 10-12) and recovery means (function part of the print control that renew the print job form stop state to non stop state, (BMM acquirement, extension, print, paper discharge), fig. 10C) for recovering previous state of each of the jobs (A1, A2, A3, A4) being held in the plurality of queues, at the time of recovery from a failure, (printing for host A requires A3 size while A4 paper is contained in the hopper, column 8, lines 30-35) if any failure occurred while the jobs are being scheduled by the scheduling means. (Fig. 10A, fig. 10B)

Regarding claim 16: Sugiura et al. teaches a job scheduling device (fig. 6) for storing, in a queue, (column 7, line 58) print jobs (fig. 7, column 7, lines 55-60, column 8, lines 15-20) which include print data and attribute information (fig. 7) and for which processing requests (print request, column 8, line 18) were received from terminals, (host, column 8, line 16) and for sequentially printing the print jobs held in the queue (fig. 10A) based on the attribute information using a job execution section, (print operation section, fig. 6) the job scheduling device comprising: a plurality of queues (wait for BMM acquirement queue, wait for extension queue,

wait for print queue, wait for paper discharge queue, and stop wait queue, fig. 10A, column 8, lines 10-12) provided corresponding to print job states; (non stop state, (BMM acquirement, extension, print, paper discharge), and stop state, fig. 10A) scheduling means (CPU, fig. 6, column 7, lines 50-65) for scheduling the print jobs using the plurality of queues; and attribute modifying means (the function part of the print control that is controlling the change of paper feed inlet pattern, column 10, lines 60-65) for modifying the attribute information (definition of the paper inlet pattern, column 10, line 64) only when a print job can be changed at the time that an instruction (command generated after depressing the set key, column 10, line 61) for modifying the attribute information (paper feed inlet, column 10, lines 19-21) of the print job is received, and when the instruction is free from errors (the attribute information can only be changed by a user's program, column 10, lines 45-60, when the instruction is programed wrong by the user, the correct instruction cannot be changed).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use · or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Lobiondo (U.S. Patent # 5,287,194).

Regarding claim 6: Lobiondo teaches a job processing system (fig. 1) comprising a

terminal equipment workstation, column 3, lines 29-35) for issuing a processing request, (column

3, lines 55-60) and a job scheduling device (scheduler, column 3, line s 35-50) which

sequentially processes jobs (fig. 4, shows that the program of the scheduler process print job

individually) by storing the jobs received from the terminal equipment in a queue (spooler,

column 3, line 58) and issuing a processing request, (allocating print job, column 6, line 59)

relating to a document specified by the job stored in the queue, to a job execution section,

(available printer, column 7, line 5-10) the terminal equipment comprising: attribute information

adding means (column 3, lines 33-35) for adding information relating to job wait control (the

time the job is to be finished, column 4, line 40-45) and message to information relating to the

wait control to the job request as attribute information, (information entered, column 3, lines 50-

65) and the scheduling device comprising: job information preparing means (the function part of

the scheduler checking print job for different job requirement, column 4, lines 49-51)for

preparing job information which specifies a received job; attribute information setting means (the

function part of the scheduler allocating print job to printer that meet the requirement, column 4,

lines 45-65) for setting attribute information included in the received job in the job information; a

queue (print spooler, column 3, line 58) for storing the prepared job information in order; control

state setting means which, (the function part of the scheduler that is setting the print job to be

printed on time, column 4, lines 50-60) if wait control is set to the job information stored in the

queue, renders (allocating print job to printers, column 4, lines 54-60) a job associated with that

job information in a wait control state when processing of that job is started or completed; and

message information informing means (the function part of the scheduler that is informing user

information set with respect to print job, column 5, lines 10-15) which, when the job enters the

wait control state, informs the terminal equipment of message information set with respect to that

job.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura et al. (U.S.

Patent # 6,047,111) in view of Rourke et al. (U.S. Patent # 5,398,289).

Regarding claim 2: Sugiura teaches a job processing system (column 2, lines 45-50)

comprising a terminal equipment (host device, column 2, line 49) for issuing a job request (print

request, column 2, line 48) by handling a plurality of documents (A1, A2, A3, A4, fig. 10A) as

one job, and a job scheduling device (CPU 11, fig. 6)) which sequentially processes jobs (print

job is connected to print queue connection points page by page, column 8, lines 15-20, fig. 10A)

that by storing the jobs, received from the terminal equipment through a network, (column 6, line

38) in a queue (column 7, lines 50-60) and sending a job execution section (23, fig. 6) a

processing request (request process of print, fig. 11b) relating to a document specified by the job

stored in the queue, the terminal equipment comprising: attribute information adding means (the

program code that allows users to assign paper feed inlet and paper discharge outlet, column 10,

lines 20-32) for adding to information which specifies a job output method to a job request as

attribute information of the job, and the job scheduling device comprising: attribute information

setting means (the function part of the printer control that is controlling the print specification

information, column 7, lines 50-60, fig. 7) for acquiring attribute information (fig. 7) included in

the received job and sets the attribute information (column 7, lines 55-60) to information which

specifies a job and a document; (fig. 10A) a queue for storing, (column 7, lines 55-60) as a job, a

group of items of the information which specify a job and a document; (fig. 7) and output result

control means (the function part of the printer control that carries out printing in accordance with

the print request, column 3, lines 33-35) which, upon reference (in accordance, column 3, line

33-34) to the information items (printing specification, column 3, lines 23-25, fig. 7) which

specify a job and a document with respect to the job stored in the queue, controls the processing

request issued to the job execution section in such a way that a specified number of copies (fig.

10c shows one copy of each job are output) of the job are output using the information (print

specification, fig. 7) which specifies a job output method.

Sugiura does not teach adding information relating to the number of copies of the job and

information relating to a job output result to the job request as job attribute information; and a

specified number of copies of the job are only output in a collated manner if collation processing

is specified or a specified number of copies of the job are only output in an uncollated manner if uncollation processing is specified.

Rourke, in the same area of programming print job teaches: adding information relating to the number of copies of the job (column 8, lines 24-25) and information relating to a job output result to the job request as job attribute information; and a specified number of copies of the job are only output in a collated manner if collation processing is specified (column 8, lines 23-46) or a specified number of copies of the job are only output in an uncollated manner if uncollation processing is specified.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sugiura to include: adding information relating to the number of copies of the job and information relating to a job output result to the job request as job attribute information; and a specified number of copies of the job are only output in a collated manner if collation processing is specified or a specified number of copies of the job are only output in an uncollated manner if uncollation processing is specified.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sugiura by the teaching of Rourke because of the following reasons: (a) it would have allowed users to select the number of copies of a print job to be printed, and (b) it would have allowed users to set a print job according to his own preference such as printing a print job collated or uncollated.

7.   Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura et al.

(U.S. Patent # 6,047,111) in view of Nezu. (U.S. Patent # 5,638,511).

        Regarding claim 5: Sugiura et al. teach a job processing system (column 2, lines 45-50)

comprising a terminal equipment (host device, column 2, line 49) for issuing a processing request

by (print request, column 2, line 48) handling a plurality of documents (A1, A2, A3, A4, fig.

10A) as one job, a job execution section (23, fig. 6) for printing the documents, and a job

scheduling device (CPU, fig. 6) which accepts a document fig. 8) input from the terminal

equipment through a network (column 6, line 38) and issues a processing request relating to that

document to the job execution section, (S17, fig. 11B) the terminal equipment comprising:

control information specifying means (the program code that allows users to assign the printing

of A1, A2, A3, and A4, fig. 10A) for specifying an input wait (connected to BMM, column 8,

line 44) for a leading document (A1) among the plurality of documents, and the job scheduling

device comprising: preparation means (the function of the printer CPU that controls the print

specification information, column 7, lines 55-60) for preparing information which specifies a

received document; (fig. 7) queuing means (column 7, lines 55-60) for storing the prepared

information which specifies the document by associating the information on a job-by-job basis;

(fig. 7) control information setting means (the function of the print CPU that set print

specification information, fig. 7) which, if an input wait is specified (information of queue

connection, fig. 7)for the leading document (A1, fig. 10A) among a plurality of received

documents, (A1, A2, A3, A4, fig. 10A) sets the input wait (set the connection point to BMM,

column 8, line 44, fig. 7) to information for specifying this leading document; and control state

setting means which, (S15, fig. 11B) if the input wait is set to information which specifies the

leading document of the job stored in the queuing means, renders that job in an input wait state,

(S6, fig. 11B) wherein the job scheduling device sequentially retrieves jobs stored in the queuing

means when the job execution section becomes enabled to accept processing, (fig. 10A) issues a

processing request (S17, fig. 11B) for a corresponding document when there is information

specifying a document to which a processing request can be issued, and when a job is placed in

the input wait state, prevents the issue of processing requests with respect to a document for that

job (when the document is in BMM state, the program cannot request process of print, fig. 11B)

and documents for subsequent jobs until that job is released from the input wait state by a user's

instruction or a timeout (the time is complete form S6 to S8, fig. 11B).

Sugiura does not teach using a password to control processing of documents.

Nezu, in the same area of programming print job teaches: to use a password (collation key

abstract) for controlling the precessing of print jobs.

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Sugiura to include: using a password to control

processing of the document.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Sugiura by the teaching of Nezu because of the following

reasons: (a) it would have added security in the printing process for the users by allowing users having the correct password to access a print job.

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

GABRIEL GARCIA
PRIMARY EXAMINER
January 14, 2002